



SANYO Semiconductors

DATA SHEET

SBE803 — Schottky Barrier Diode

90V, 200mA Rectifier

Applications

- High frequency rectification (switching regulators, converters, choppers).

Features

- Low forward voltage ($V_F \text{ max}=0.7\text{V}$).
- Fast reverse recovery time ($t_{rr} \text{ max}=10\text{ns}$).
- Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.

Specifications

Absolute Maximum Ratings at $T_a=25^\circ\text{C}$ (Value per element)

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		90	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}		95	V
Average Output Current	I_O		200	mA
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	5	A
Junction Temperature	T_J		-55 to +125	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +125	$^\circ\text{C}$

Electrical Characteristics at $T_a=25^\circ\text{C}$ (Value per element)

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=200\mu\text{A}$	90			V
Forward Voltage	V_F	$I_F=200\text{mA}$			0.7	V
Reverse Current	I_R	$V_R=45\text{V}$			50	μA
Interterminal Capacitance	C	$V_R=10\text{V}, f=1\text{MHz}$		10		pF
Reverse Recovery Time	T_{rr}	$I_F=I_R=100\text{mA}$, See specified Test Circuit.			10	ns
Thermal Resistance	$R_{th(j-a)}$	Mounted on a ceramic board (600mm ² ×0.8mm)			110	$^\circ\text{C/W}$

Marking : SB

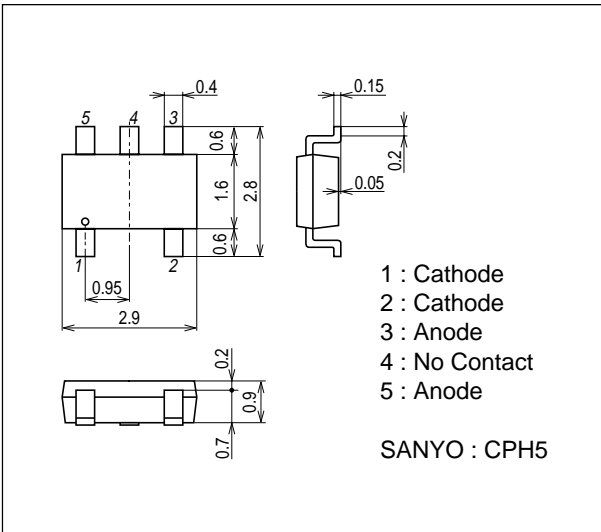
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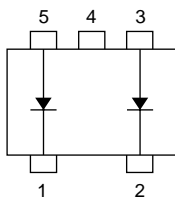
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

Package Dimensions

unit : mm
1294A



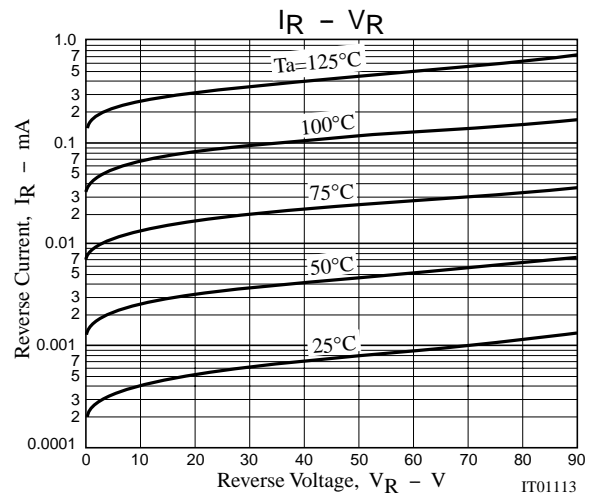
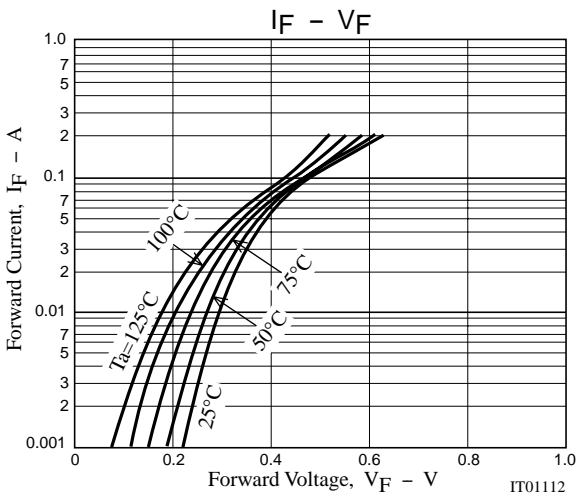
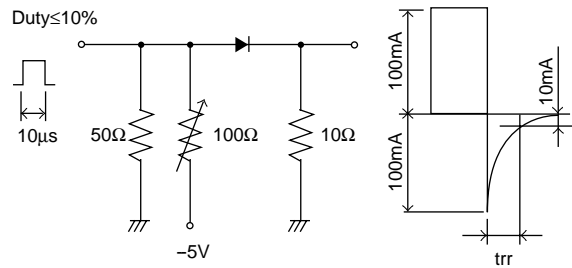
Electrical Connection

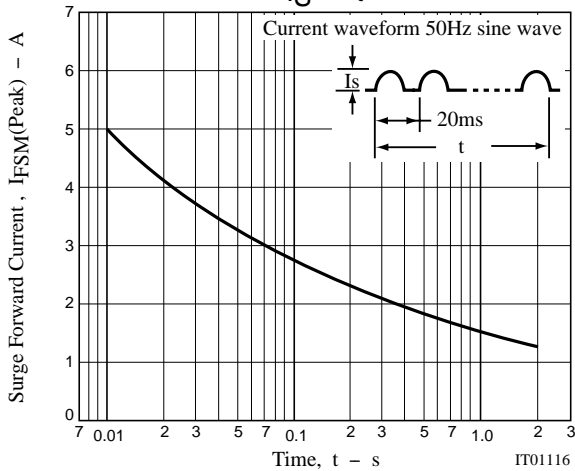
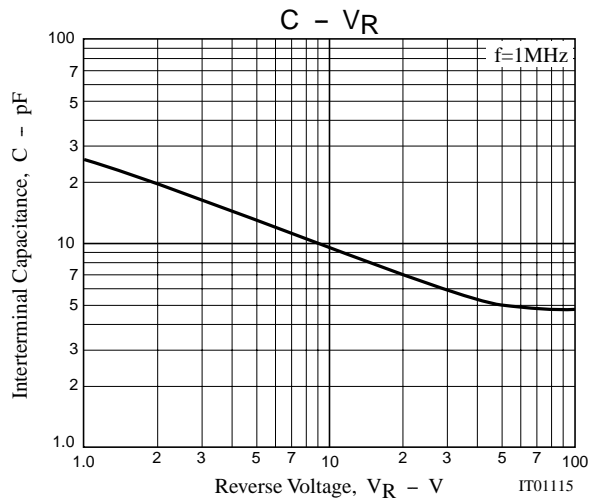
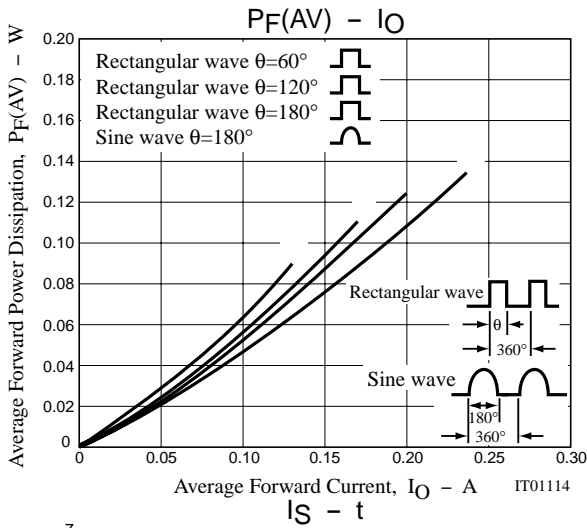


1 : Cathode
2 : Cathode
3 : Anode
4 : No Contact
5 : Anode

Top view

t_{rr} Specified Test Circuit





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